

## CLAIMS:

1. A switching power supply unit comprising a transformer, a switching circuit disposed on a primary side of the transformer, a self-driven type  
5 synchronous rectifier circuit disposed on a secondary side of the transformer and including at least one rectifier switch, and a self-oscillation stop circuit disposed on the secondary side of the transformer and adapted to turn off the at least one rectifier switch when a voltage between opposite ends of the at least one rectifier switch exceeds a  
10 predetermined value.
2. A switching power supply unit in accordance with Claim 1, which further comprise a Zener diode connected in parallel with the at least one rectifier switch.  
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3. A switching power supply unit in accordance with Claim 2, wherein a Zener voltage of the Zener diode is determined so as to be higher than a voltage applied between the opposite ends of the at least one rectifier switch during ordinary operation.  
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4. A switching power supply unit in accordance with Claim 3, wherein the Zener voltage of the Zener diode is determined so as to be lower than a withstand voltage of the at least one rectifier switch.
- 25 5. A switching power supply unit in accordance with Claim 1, wherein the self-oscillation stop circuit is constituted so as to turn off the at least one rectifier switch by substantially short-circuiting a gate and a source of

the at least one rectifier switch.

6. A switching power supply unit in accordance with Claim 2, wherein  
the self-oscillation stop circuit is constituted so as to turn off the at least  
5 one rectifier switch by substantially short-circuiting a gate and a source of  
the at least one rectifier switch.

7. A switching power supply unit in accordance with Claim 3, wherein  
the self-oscillation stop circuit is constituted so as to turn off the at least  
10 one rectifier switch by substantially short-circuiting a gate and a source of  
the at least one rectifier switch.

8. A switching power supply unit in accordance with Claim 4, wherein  
the self-oscillation stop circuit is constituted so as to turn off the at least  
15 one rectifier switch by substantially short-circuiting a gate and a source of  
the at least one rectifier switch.